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Yoshihito OHMURA[a,*] and Kazuyuki ONIMARU[b]: **Materials for the Distribution of Lichens in Japan (16) *Usnea filipendula* Stirt.**

地衣類分布資料（16）ナガヒゲサルオガセ（大村嘉人[a,*]，鬼丸和幸[b]）

Summary: *Usnea filipendula* Stirt. was rediscovered in Hokkaido of Japan for the first time since 1922. Diagnostic features of morphology and chemistry are described based on Japanese materials

During our study of the lichen flora in Japan, a specimen of an interesting *Usnea* species was collected at Bihoro-cho in northeastern Hokkaido. It is identified as *U. filipendula* Stirt. (*Parmeliaceae*, lichenized *Ascomycota*) by the following diagnostic features: (1) pendent thallus with anisotomic-dichotomous branching (Fig. 1A), (2) jet black base (Fig. 1B), (3) cylindrical papillae on thicker branches (Fig. 1C), (4) elongated terminal branches, (5) round to irregularly shaped soralia which are convex at the top with many isidiomorphs (Fig. 1D), (6) the absence of granular soredia, (7) the *florida*-type plectenchymatous cortex (see Ohmura 2001), and (8) the presence of salazinic acid as major substance.

The present specimen has some differences in morphology from the specimen previously reported in Japan [Y. Asahina 2210 (TNS) in Asahina (1956)]: the thallus is rather shorter (8.2 cm long) (Fig. 1A); and CMA (the ratio of cortex, medulla, and axis; cf. Clerc 1984) is 9.0/26/30, whereas it is 9.5/23/36 in Y. Asahina 2210 (Ohmura 2001). These differences can be considered as a natural variation within a species (Herrera-Campos et al. 1998).

Usnea filipendula resembles *U. subfloridana* Stirt., especially when the thalli are small and short. However, it is readily distinguished from the latter by the elongated branches and presence of salazinic acid. It may be also confused with *U. wasmuthii* Räsänen in having the same chemistry. But soralia of *U. filipendula* are convex at the top, while those of *U. wasmuthii* are concave.

Usnea filipendula is widely distributed in circumpolar boreal to northern temperate regions (Thomson 1984). In Japan, however, it has been known only from one locality of Hokkaido, and it has not been collected since 1922 (Asahina 1956). This is the second report of the species in Japan.

Specimens examined. JAPAN. Hokkaido. Prov. Kitami: Oketo, Tokoro-gun, Oct. 1922, Y. Asahina 2210 (TNS); Hinami, Bihoro-cho, Abashiri-gun, on bark of *Abies sachalinensis*, 330 m alt., 11 Aug. 2009, Y. Ohmura 6771 (TNS).

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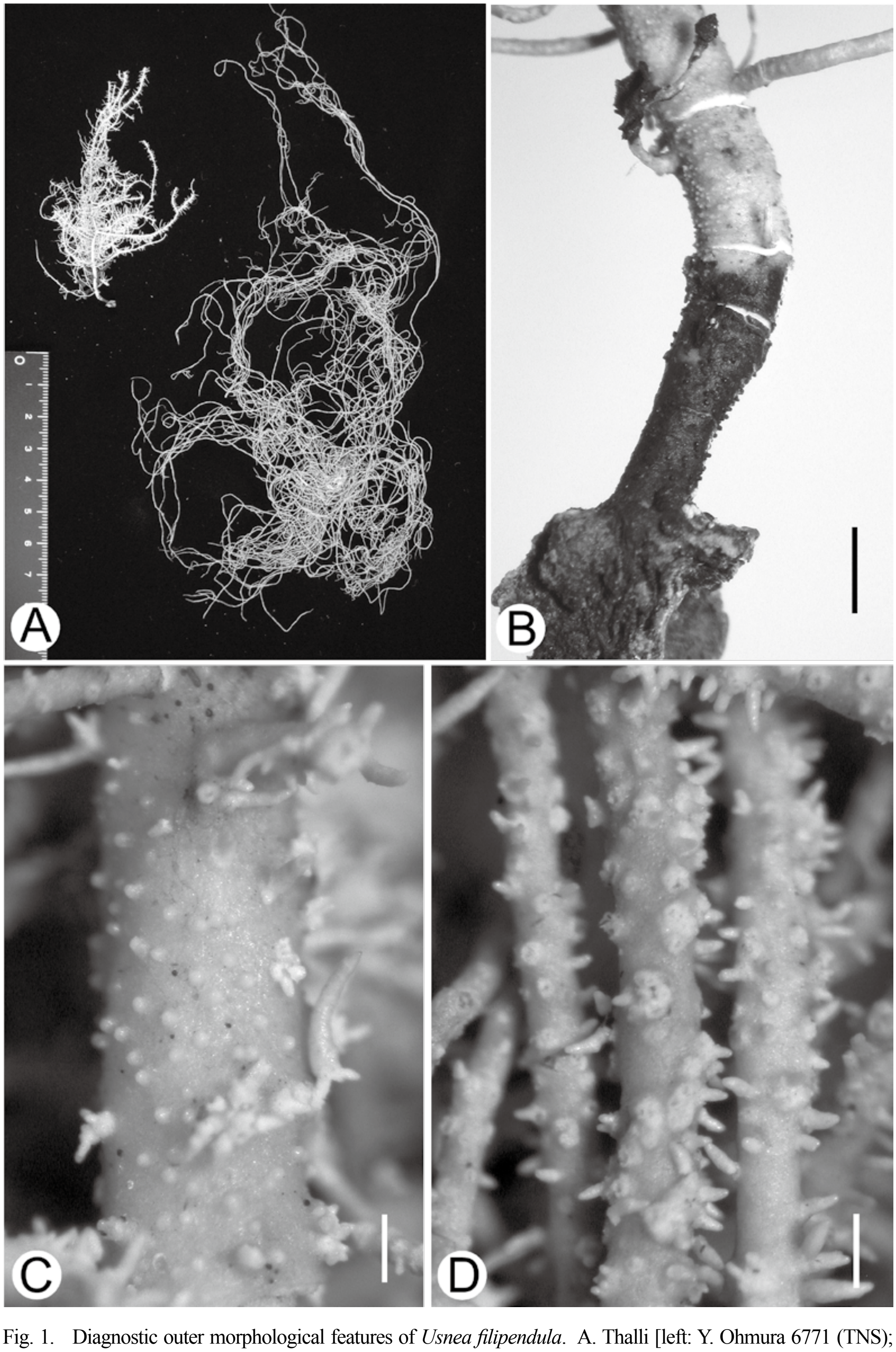

Fig. 1. Diagnostic outer morphological features of *Usnea filipendula*. A. Thalli [left: Y. Ohmura 6771 (TNS); right: Y. Asahina 2210 (TNS)]. B. Jet black base of the thallus. C. Cylindrical papillae. D. Convex soralia with many isidiomorphs. B–D. Y. Ohmura 6771 (TNS). Scale: B = 1 mm, C, D = 200 μm.

Macrolichens. 504 pp. Columbia University Press. New York.

ウメノキゴケ科サルオガセ属地衣類のナガヒゲサルオガセ *Usnea filipendula* が北海道美幌町内のトドマツ樹皮上から採集された．ナガヒゲサルオガセは以下の形質で特徴づけられる．地衣体は懸垂性で基部が黒色，円筒状のパピラ，伸張した枝，裂芽状突起を伴う凸状の粉芽塊を持ち，顆粒状粉芽がなく，皮層は *florida* タイプで，サラチン酸を主成分として持つ．本種は，周北極域の寒帯から温帯北方域に広く分布していることが知られているが，日本国内では1922年に北海道常呂郡置戸でただ一度採集されているだけであった．国内における本種の再発見は87年ぶりとなる．

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日本新産帰化植物キヌイトツメクサ（ナデシコ科）（大森威宏）

Takehiro OHMORI: *Sagina decumbens* (Elliot) Torrey & A. Gray (*Caryophyllaceae*) Newly Naturalized in Japan

Summary: *Sagina decumbens* (Elliot) Torrey & A. Gray (*Caryophyllaceae*) is newly reported from Japan. Plants belonging to this species was found in Takasaki, Gunma Pref., central Honshu, Japan in 2009. Another collection in 1995 from Sakai, Osaka Pref., western Honshu, Japan was also identified as *S. decumbens*. Two subspecies are recognized in this species and from Takasaki and Sakai were ascribed to *S. decumbens* subsp. *decumbens*.

筆者は2009年4月26日に，ナデシコ科ツメクサ属と思われる植物が群馬県高崎市の歩道のタイルの間に生育しているのに気づいた（Fig.1）．この植物は北米大陸に自生する *Sagina decumbens* (Elliot) Torrey & A. Gray に同定された．さらに，国立科学博物館での標本調査の結果，大阪府堺市草部の墓地で1995年5月22日に採集され，「キヌイトツメクサ」の仮称が与えられたツメクサ属の未同定標本（平野弘二 K. Hirano 857, TNS 683955）も本種であることが判明した．その後2000年代に大阪府北部で行われた調査でも，未同定種としてキヌイトツメクサの記録がある（北河内自然愛好会編 2004, 枚方いきもの調査会植物部会編 2007）．群馬県高崎市産の本種の証拠標本（大森威宏 7059）は群馬県立自然史博物館（GBIF における機関コード：GMNHJ）に収蔵し，重複標本を国立科学博物館（TNS）に寄贈した．

Sagina decumbens は北米大陸に分布する一年生草本で，東岸に分布する subsp. *decumbens* と西岸に分布する subsp. *occidentalis* (S. Watson) G. E. Crow の2亜種に分けられる（Crow 2005）．*Sagina decumbens* subsp. *decumbens* は種子に網目状の隆起がある点で subsp. *occidentalis* と区別できる．本種は通常白色の花弁をもつがそのサイズには変異が大きい．さらに，花弁を欠く var. *smithii* (A. Gray) S. Watson を識別する場合もあるが，subsp. *decumbens* の一型として扱うのが妥当とされる（Crow 2005）．高崎市及び堺市産の *S. decumbens* の種子の表面には網目状の隆起と乳頭状の突起が顕著で，subsp. *decumbens* の特徴と合致する（Fig. 2）．

本種は茎が繊細で葉も細く，在来のツメクサ *S. japonica* のように多肉質にならない．本種は，花が5数性と4数性のものが混り，花柄に腺毛があ